How to prioritise primary care diabetes services during and post COVID-19 pandemic

by Pam Brown and Jane Diggle

Context

The COVID-19 pandemic forced practices (and community teams) to focus on delivering acute care, often at the expense of chronic disease management, including diabetes reviews. As the acute phase of the pandemic recedes, teams now face significant backlogs of diabetes reviews. It is likely to take at least 6–12 months for services to catch up. During this time, it is important that we prioritise care delivery to those who need more urgent reviews.

When identifying groups from our diabetes registers for early review, guidelines propose that we prioritise those most at risk of serious consequences from COVID-19, from CVD and from other diabetes complications. Fortunately, there is much overlap between these groups. Although some of the risk factors, such as age, are non-modifiable, we will want to prioritise review to optimise their modifiable risk factors, such as HbA_{1c}. Phase 3 of NHSE's response to COVID-19 also encourages focus on improving health and wider inequalities (see **Box D**, overleaf).

Here, we outline ways to identify these highest risk groups for COVID-19 and CVD, clarify the type of review and consultation required by individual people, and help teams assess their capacity for managing this catch-up workload.

By adapting these processes to our individual practice, cluster or CCG setting, it is hoped that those people who would benefit from more urgent reviews receive them in as timely a manner as possible.

Practices may want to incorporate a specific SNOMED COVID-19 restriction code or a statement that makes it clear that we have made prioritisation decisions based on review of individual patient circumstances in a restricted environment and with a backlog of reviews due to the effects of COVID-19. These prioritisation decisions are flexible and can be reviewed and revised, if required.

A COVID-19 risk score, similar to the QRISK score for CVD, is in late-stage development and this toolkit will help us to prioritise those on our diabetes registers who are most at risk from COVID-19.

Box A. Time frames for review[1]

Data from the National Diabetes Audit 2018/19 show the proportions of people with type 1 or type 2 diabetes in England with HbA_{1c} above different thresholds. However, many practices are finding many people's HbA_{1c} has risen significantly during lockdown, so numbers are likely to be higher.

HbA_{1c} threshold (mmol/mol)	Type 1 diabetes above threshold (%)	Type 2 diabetes above threshold (%)
97	7.9	3.4
86	15.5	6.6
75	29.5	12.3

Based on these data, the following time frame for review for each category has been proposed:

Category	Priority	Ideal time frame to be seen within	Likely % of total diabetes register
RED	Urgent	3 months	10
AMBER	Priority	6 months	30–35
GREEN	Routine	12 months	55–60

Box B. Risk factors for serious COVID-19 disease

Modifiable risk factors[3]

- Higher blood glucose levels (HbA_{1c} ≥86 vs 48–53 mmol/mol: mortality doubles in type 1 diabetes and increases ×1.6 in type 2 diabetes).
- Diabetes comorbidities and complications.
- Obesity (BMI ≥40 vs 25–29.9: mortality doubles in type 1 diabetes and ×1.46 in type 2 diabetes).
- Pre-existing kidney disease, heart failure and previous stroke.
- Absence of recorded care processes for smoking status, BMI or HbA_{1c} are associated with increased mortality.

Non-modifiable risk factors

- Advancing age (strongest mortality risk factor).
- Gender (greater risk in male versus female).
- People of black or Asian ethnicity.
- Deprivation.

Search strategy

No particular search strategy is superior to another and searches will vary according to administrative expertise, support and capacity within organisations. Primary Care Networks, federations and CCGs may be able to offer support by sharing tailored searches.

Higher HbA_{1c} increases risk of worse outcomes and mortality from COVID-19 and the risk of diabetes-related complications. Therefore, initial prioritisation by HbA_{1c} may be a good place to start.

RED, **AMBER** and **GREEN** categories based on risk factors correlate with need for urgent, priority or routine reviews (see **Box A**, left).

Absent data/overdue review:
No HbA_{1c} >18 months ▶AMBER
No HbA_{1c} >24 months ▶RED

Initial search: last recorded HbA_{1c}

RED	AMBER I	AMBER II	GREEN
HbA_{1c} >86 mmol/mol	HbA_{1c} 65–86 mmol/mol	HbA_{1c} 59–64 mmol/mol	HbA_{1c} ≤58 mmol/mol

Box C. People who might benefit from early review or opportunistic identification:

- Recent admission for any cause (particularly diabetes-related)
- Acute illness (incl. COVID-19)
- New blood results received
- New complication (e.g. foot problem, hypoglycaemia)
- New CVD/CKD diagnosis
- New therapy commenced.

REVIEW RECORDS to decide ▶RED or ▶AMBER category.

ADDITIONAL SEARCHES on amber/green groups to identify risk factors that may alter risk category and prioritisation (based on Risk factors [see Box B])[2]

Blood pressure:	≥160/100 mmHg ▶RED	141/81–159/99 mmHg ▶AMBER
Diabetes complication:	Retinopathy/high-risk foot ▶RED	
CKD:	eGFR <45 mL/min/1.73 m^2 ▶RED	eGFR 45–60 mL/min/1.73 m^2 ▶AMBER
CVD/HF/stroke:	Assess CV risk factors to decide if ▶RED or ▶AMBER category. For example, may need additional therapy: ▶RED Not on statin but established CVD (excl. haemorrhagic stroke) ▶AMBER Not on statin despite ≥40 years and QRisk ≥10%	
BMI:	≥40 kg/m^2 ▶RED	≥30 kg/m^2 ▶AMBER

Those without any of the risk factors above that would place them in the red or amber group will remain in the GREEN category.

Short telephone call to:

- agree deferred review
- check no new diabetes-related concerns
- offer reassurance
- discuss safety-netting advice.

Although the key searches outlined above stratify by specific risk factors, clinical judgement will identify additional at-risk groups where early review is appropriate, including:

- vulnerable individuals
- those with significant mental health problems
- those with learning disabilities
- frail elderly, particularly if cognitive impairment
- those from BAME groups
- those with eating disorders.

Some of these can be identified via additional searches.

Abbreviations: BAME=black, Asian and minority ethnic; BMI=body mass index; BP=blood pressure; CKD=chronic kidney disease; CVD=cardiovascular disease; EASD=European Association for the Study of Diabetes; F2F=face-to-face; GP=general practitioner; HCA=healthcare assistant; HCP=healthcare professional; NHSE=NHS England; PPE=personal protective equipment; PTSD=post-traumatic stress disorder

Citation: Brown P, Diggle J (2020) How to prioritise primary care diabetes services during and post COVID-19 pandemic. *Journal of Diabetes Nursing* **24**: JDN154

What action is required?

NUMBERS

Having completed searches that stratify individuals according to risk and category (**RED**/**AMBER**/**GREEN**), consider:

- How many individuals have been identified within each category? Be aware you might have a large proportion in your **RED** or **AMBER** groups requiring Urgent or Priority review. Plan how you can work through them methodically within current constraints.

NEEDS

- Experienced clinician to review electronic records (**RED** category, then **AMBER**) to identify **NEEDS**:
  - Type of consultation – data gathering (remote or F2F), full annual review or targeted partial review.
  - Time slot needed.
  - Type of practitioner (HCA, experienced clinician).
  - Remote or F2F consultation.

  These details should be shared with administrative staff responsible for booking appointment slots.

  Depending on restrictions in place and delay in undertaking reviews in the **GREEN** category, these people will all need data gathering and full annual review (see How to undertake a remote diabetes review).

PLANNING

- Review ongoing challenges – impact of social distancing on throughput of patients and staffing/workforce concerns, whether lockdown has been lifted or is ongoing.
- To determine capacity, consider:
  - Number of clinics per week (nurse, HCA, GP, pharmacist).
  - Number of people who can be reviewed in each remote clinic.
  - Estimated capacity in next 3 months.
  - Estimated capacity in next 6 months.
  - Remember to factor in staff holidays and competing priorities, such as flu immunisation clinics, and to seek guidance from local laboratories on their capacity, which may restrict phlebotomy services.
- Practices may want to use an objective risk stratification tool (e.g. bit.ly/2ZXVqZ5) to facilitate COVID-19 risk assessment of team members not already identified as "vulnerable" and requiring to shield.
- Estimate your capacity for the different types of appointments and match this with priority appointments required (e.g. if only HCA doing data-gathering visits and has 3 diabetes clinics per week, each accommodating 8 people*, 24 slots will be available for F2F data gathering per week. Be realistic about what can be achieved safely and within the fluctuating restrictions faced.

  Once capacity has been calculated for each member of the team, review to ensure that there is no bottleneck in the system (e.g. full annual reviews being limited by number of data-gathering appointments available). Explore how to optimise use of each team member and each appointment type.

  *Amend this in relation to waiting-room capacity, social distancing and PPE use.
- Practices should work through **RED** to **AMBER** to **GREEN** categories without delay, as capacity allows. In addition, time will be needed to deal with opportunistic additions to the **RED**/**AMBER** categories (see **Box C**, overleaf).

Consider psychological risks[4]

When assessing suitability for delayed review, consider psychological as well as physical risks – people may need referral for additional support now or move from green to amber group for earlier review. Know your local referral pathways and current ways of working. Remember your own psychological health due to workload and infection concerns (see **Useful resources**).

- Direct psychological risks – anxiety, bereavement, trauma, PTSD (if serious COVID-19 admission), eating disorders.
- Indirect psychological risks – financial or employment problems, lack of activity, disrupted diabetes education and support.

Useful resources

- Looking after your mental health during COVID-19: Six tips for healthcare professionals. A quick reference guide from ***Diabetes & Primary Care***: bit.ly/2QcyrnA
- **Mind**, the UK charity for better mental health, provides advice and support to empower anyone experiencing a mental health problem: www.mind.org.uk
- **Diabetes UK**, professional resources on diabetes and psychological care: bit.ly/34gvJ8R

Practicalities

Use PPE as recommended for any F2F consultations and keep appointments as short as possible. Explain these are for data gathering only and that full remote consultation will follow once results are available. See How to undertake a remote diabetes review and Factsheet of patient resources for additional information and guidance.

- Avoid busy waiting rooms and risk of transmission.
- Ensure people know to reschedule if they have any symptoms of COVID-19, are feeling unwell or isolating after known contact tracing.
- Use COVID-19-free spaces for diabetes-related reviews.
- Encourage patient attendance by explaining what is being done to protect people.
- Agree how to document and manage those who choose not to attend but need data gathering.
- Provide careful safety-netting and resource links to those in the routine group, especially around foot inspection/care.
- Use home BP measurements where possible.
- Use Diabetes UK Touch the Toes Test to minimise risk of cross infection, instead of monofilament testing (bit.ly/2BS9LwJ).

Pitfalls to avoid

- Telephone triage to **GREEN**/routine review group by inexperienced clinician who may have difficulty identifying risk scenarios.
- Booking people with team member who does not have the skill set to carry out the required review.
- Duplication of effort/patient discussions.
- Timing issues – booking too short or long appointments for the consultation needed.
- Lack of clarity about whether F2F or remote consultation when notifying people of appointments.

Box D. Address inequalities[5]

- Protect the most vulnerable.
- Restore services inclusively, identifying those in greatest need and disadvantaged people (in particular, consider deprivation and ethnicity).
- Develop digitally enabled care pathways that increase inclusion.
- Accelerate prevention programmes, engaging those most at risk of poor outcomes.
- Particularly support those with mental ill health.
- Strengthen leadership and accountability, address inequalities, increase diversity.
- Ensure datasets are complete and timely to respond to inequalities.
- Collaborate locally in planning and delivering action to address health inequalities.

References

[1]East of England Diabetes Clinical Network (2020) *Delivering Diabetes Care during the COVID-19 Pandemic – the 'new normal'*. bit.ly/32uMKcZ

[2]ABCD (2020) *A Quick Guidance to Risk Stratification and Recovery of Diabetes Services in the post-Covid-19 Era*. bit.ly/2ECYvX7

[3]Holman N et al (2020) Risk factors for COVID-19-related mortality in people with type 1 and type 2 diabetes in England: a population-based cohort study. *Lancet Diabetes Endocrinol* **8**: 823–33

[4]Stewart R (2020) How do we recover from COVID-19? Helping diabetes teams foresee and prepare for the psychological harms. *Diabet Med* 6 Jul [Epub ahead of print]

[5]NHSE (2020) *Implementing phase 3 of the NHS response to the COVID-19 pandemic*. bit.ly/3m0DYwt

This document is associated with a broadcast series funded by Novo Nordisk. Novo Nordisk has had no editorial input, or control, over the content. PCDS is responsible for all of the content.